

Military Vaccine Agency Communications Plan 2013 - 2014 Seasonal Influenza

Issue

- The Department of Defense (DoD) has implemented the 2013–2014 Influenza Vaccination Program (IVP).
- Influenza immunizations are mandatory for all uniformed personnel.
- Influenza immunizations are mandatory for DoD civilian healthcare personnel who provide direct patient care.
- DoD's goal is to vaccinate 100 percent of uniformed personnel and required civilians, with a milestone requirement of ≥ 90 percent by 16 December 2013.

Impact to Department of Defense

- Influenza (the flu) is a contagious respiratory illness caused by influenza viruses. Flu seasons are unpredictable and have the potential to impact DoD force readiness and mission. Immunizing with influenza vaccine has the potential to reduce the number of cases of influenza infection, hospitalization, and clinic visits related to influenza.
- Vaccine will be available as early as mid-August.
- Distribution will begin with DoD-established high priority areas including CENTCOM, Korea, FLEET Forces, EUCOM/AFRICOM, and PACOM.
- DoD medical treatment facilities (MTFs) should expect multiple deliveries over several months.

Policy

- DoD policy requires immunization of all uniformed personnel against influenza according to Service-specific guidelines.
- HA Policy 08-005, dated 4 April 2008, mandates all civilian healthcare personnel (HCP) who provide direct care to patients in MTFs must be immunized against seasonal influenza each year as a condition of employment.
- In 2012, the Joint Commission strengthened the Infection Control standard (IC.02.04.01) addressing influenza vaccination of HCP. MTFs should incorporate these standards into their influenza immunization programs.
- All Services will monitor compliance using Service-specific immunization tracking systems.
- DoD and the Services shall attempt to vaccinate all eligible beneficiaries requiring or requesting immunization in accordance with the Centers for



Disease Control and Prevention (CDC) and Advisory Committee on Immunization Practices (ACIP) guidelines.

- Utilize first available vaccine doses to target high priority groups as outlined in the Health Affairs guidance dated 21 June 2013.

Key Messages

- Annual vaccination remains the cornerstone of preventing influenza infections.
- The DoD IVP is part of our national defense strategy to safeguard DoD personnel against influenza disease.
- Influenza vaccinations should begin immediately upon receipt of vaccine and should continue until supply is exhausted or the vaccine expiration date has been reached.
- Infection from influenza viruses can result in illness ranging from mild to severe and may cause life-threatening complications.
- Individuals at highest risk for infections and complications include children younger than 5 years, adults 50 years and older and pregnant women.
- Healthcare personnel should take time to screen for overdue routine adult vaccinations and provide instruction on how to obtain them if not administered at the time of screening.

Talking Points

- Influenza is a contagious respiratory illness caused by influenza viruses, and the best way to protect against infection is to get vaccinated every year.
- Two forms of influenza vaccine are licensed in the United States:
 - An inactivated vaccine given by intramuscular or intradermal injection.
 - A live, attenuated (weakened) vaccine sprayed into the nose.
- The inactivated, injectable vaccines are trivalent (contain three strains of virus, two influenza A and one influenza B) and are licensed for persons 6 months and older. The live-virus intranasal vaccine is quadrivalent (contain four strains of virus, two influenza A and two influenza B) and is licensed for healthy persons ages 2 to 49. For persons eligible to receive either vaccine, ACIP does not express a preference for use of any particular product over another.
- Vaccinate all individuals with available product in accordance with package insert.



- Studies have shown that both the injectable vaccine and the intranasal vaccine are safe and effective in preventing influenza.
- The Epidemiology Branch of the Air Force School of Aerospace Medicine (USAFSAM) updates the influenza surveillance website weekly during the influenza season: <http://afhsc.army.mil/fluReports>.
- USAFSAM and the DoD Global Emerging Infections Surveillance and Response System coordinate weekly summary and final reports to the Assistant Secretary of Defense for Health Affairs.
- Commanders are charged with ensuring immunization data is entered into electronic immunization tracking systems at the point of service, or no later than close of business on the next duty day following vaccination.
- The Vaccine Adverse Event Reporting System (VAERS) is in place for reporting possible vaccine-related adverse events (www.vaers.hhs.gov).

Background & Environment

- In the United States, epidemics of influenza occur typically during the late fall and through early spring.
- During these epidemics, rates of serious illness and death are highest among persons aged ≥ 65 years, children aged < 2 years, and persons of any age who have medical conditions that place them at increased risk for complications from influenza.
- In the United States, analysis during the 1990s estimated an average of 36,000 annual deaths related to influenza, resulting in large part from an aging population.
- In the United States, the average annual number of hospitalizations due to serious complications associated with influenza has been estimated at 150,000.
- Each year, the ACIP and CDC recommend seasonal influenza vaccination of HCP as a priority. Influenza immunization benefits the HCP at the same time it benefits the patient. Studies show reducing the risk of HCP-to-patient transmission of influenza also results in reduced infections.
- For the 2013-2014 influenza season, the DoD has contracted for a total of 3.8 million doses of influenza vaccine, which includes 2.6 million doses of Inactivated Injectable Vaccine (IIV) and 1.6 million doses of quadrivalent Live Attenuated Influenza (intranasal) Vaccine (LAIV4).
- This amount will ensure that uniformed personnel, family members, and retirees are protected against influenza. MTFs should expect several deliveries to fill requirements, starting as early as August.
- Influenza A and B are the two types of influenza viruses that cause epidemic human disease.



- The 2013-2014 influenza trivalent vaccine strains are A/California/07/2009 (H1N1)-like, A/Victoria/361/2011 (H3N2)-like, and B/Massachusetts/2/2012-like antigens. The additional strain, B/Brisbane/60/2008-like antigen has been selected for those manufacturers licensed to distribute a quadrivalent influenza vaccine.
- Influenza is spread through aerosolized respiratory droplets or through contact with a contaminated object.
- Administer first available vaccine doses to deployed or deploying personnel, critical support staff, and medically high risk groups as listed in the 2013-2014 ACIP recommendations. It is recommended that Live Attenuated Influenza Vaccine (LAIV4) be administered to new accessions and beneficiaries 2 to 49 years of age without a medical contraindication.
- Injectable vaccines should be used for those in whom intranasal vaccine is medically contraindicated, or where intranasal vaccine is unavailable due to logistical constraints.
- Influenza vaccines are temperature-sensitive products and activities must comply with cold chain management guidelines when transporting and storing these vaccines.
- Individuals with allergies to egg proteins (eggs or egg products), chicken proteins, or any component of the vaccine should be screened in accordance with the ACIP Egg Allergy Algorithm.
- Influenza vaccine should not be administered to anyone with a history of Guillain-Barré Syndrome within 6 weeks of previous vaccination.
- DoD will use Fluzone®, Flucelvax®, Fluvirin®, Afluria®, and FluMist® seasonal influenza vaccines for the 2013-2014 influenza season.
- Fluzone®, manufactured by Sanofi-Pasteur, is an inactivated, trivalent influenza virus vaccine. It will be available in three presentations:
 - 0.25mL single-dose syringe (pink plunger rod) for immunizing persons 6 to 35 months of age. Presentation is preservative- and latex-free.
 - 0.5mL single-dose syringe (clear plunger rod) for immunizing persons 36 months and older. Presentation is preservative- and latex-free.
 - 5mL multi-dose vials for immunizing persons 6 months and older. Presentation is only latex-free. The multi-dose vial may be used until the expiration date on the vial is reached.
- Flucelvax® is a cell-cultured, trivalent influenza vaccine manufactured by Novartis for the 2013-2014 influenza season. The vaccine is preservative (thimerosal)-free and is used for immunizing healthy persons 18 years and older. The presentation is a pre-filled single-dose syringe without needles. The vaccine may contain latex.



- Fluvirin® is a trivalent influenza vaccine manufactured by Novartis for the 2013-2014 influenza season. The vaccine is preservative (thimerosal)-free and is used for immunizing healthy persons 4 years and older. The presentation is a pre-filled single-dose syringe without needles. The vaccine may contain latex.
- Afluria® is trivalent influenza vaccine manufactured by CSL Biotherapies and distributed by Merck. The vaccine contains a preservative (thimerosal) and used for immunizing persons 5 years of age and older. The presentation is a 5mL multi-dose vial.
 - Note: Age indication per package insert is ≥ 5 years. However, the ACIP recommends Afluria® not be used in children aged 5 to 8 years because of increased reports of febrile reactions in this age group. If no other age-appropriate, licensed inactivated seasonal influenza vaccine is available, Afluria® can be used. However, providers should discuss with parents or caregivers the benefits and risks of influenza vaccination with Afluria® before administering this vaccine. Afluria® may be used in persons aged ≥ 9 years.
- FluMist® is a live, attenuated quadrivalent influenza vaccine manufactured by MedImmune. The vaccine is preservative (thimerosal)- and latex-free and is used for immunizing healthy persons 2 to 49 years of age. The presentation is 0.2 mL pre-filled single-use sprayers.
- Cold Chain Management:
 - Cold Chain Management must be maintained with all formulations of the influenza vaccine regardless of manufacturer, when transporting and storing prior to use. The vaccine requires refrigeration storage at 2 to 8 degrees Celsius, or 36 to 46 degrees Fahrenheit, and should not be frozen.
 - Once the tip cap is removed from sprayer or needle placed on single dose syringe it must be discarded if not used by the end of the duty day.
 - Afluria® multi-dose vials must be discarded 28 days after puncture. All other vaccine multi-dose vials may be used until expiration date after puncture.
 - Afluria®, Flucelvax®, and Fluvirin® should all be stored in original packaging to protect from light.

Questions and Answers

1) What is the current DoD Seasonal Influenza policy and who should be vaccinated?

DoD policy states influenza vaccination is required for military personnel. Utilize first available vaccine doses to target high-priority groups as outlined in the



Health Affairs guidance dated 21 June 2013. More information on DoD influenza policies can be found at www.vaccines.mil/Policies/Influenza - Seasonal.

OSD (Health Affairs) Policy 08-005, dated 4 April 2008, mandates all civilian healthcare personnel who provide direct care to patients in medical treatment facilities must be immunized against seasonal influenza each year as a condition of employment. More information on OSD (Health Affairs) Policy 08-005 can be found at www.vaccines.mil/documents/1169HCPFluHAPolicy_08_005.pdf.

2) What is the primary goal of DoD's Influenza Vaccine Program (IVP)?

The primary goal is to vaccinate 100 percent of all Active Duty, National Guard, Reserve, required civilians and healthcare providers who provide direct patient care with a milestone goal of ≥ 90 percent by 16 December 2013.

3) Who does the Advisory Committee on Immunization Practices (ACIP) recommend receive annual influenza vaccination?

ACIP recommends seasonal influenza vaccinations for all people 6 months and older. Additionally, emphasis on providing routine annual vaccinations to certain groups at higher risk for influenza infection or complications should be a priority:

- All children aged 6 months through 4 years (59 months).
- All persons ≥ 50 years.
- Women who will be pregnant during influenza season.
- Anyone with long-term health problems including heart disease, kidney disease, liver disease, lung disease, metabolic disease (diabetes), asthma, anemia and other blood disorders.
- Anyone with a weakened immune system, on long-term treatment with drugs such as steroids, and cancer treatment with x-rays or drugs.
- Anyone with certain muscle or nerve disorders (such as spinal cord injuries, seizure disorders or cerebral palsy) that can lead to breathing or swallowing problems.
- Anyone 6 months through 18 years of age on long-term aspirin treatment.
- Residents of nursing homes and other chronic-care facilities.
- Anyone who lives with or cares for people at high risk for influenza-related complications.
- Health care providers.
- Household contacts and caregivers of children from 0-5 years of age and people 50 years and older.



4) When will the 2013-2014 Influenza Vaccination Program (IVP) begin?

Vaccine shipments will occur as early as mid-August. Your installation's seasonal influenza vaccination program should begin immediately upon receipt of influenza vaccine to protect individuals at risk from developing influenza or its complications. All Services will follow Service-specific implementation guidelines. Influenza vaccinations should continue until supply is exhausted or the vaccine expiration date is reached.

5) What documentation is required with influenza immunization?

It is important to document immunizations properly into electronic immunization and paper-based tracking systems. Vaccine, date of administration, lot number, manufacturer, Vaccine Information Statement version date, name of vaccine administrator, and medical exemptions for military personnel must be documented. All Services will monitor compliance using Service-specific electronic immunization tracking systems: Medical Protection System (MEDPROS), Aeromedical Services Information Management System (ASIMS), Medical Readiness Reporting System (MRRS), Shipboard Automated Medical System (SAMS), and the Defense Eligibility Enrollment Reporting System (DEERS). All MHS beneficiary immunizations should be documented into the electronic health record.

6) Where did the DoD get this year's influenza vaccine?

DoD has contracted with the Defense Logistics Agency–Troop Support (DLA-TS) to obtain influenza vaccine from three different manufacturers. Two manufacturers, Sanofi-Pasteur (Fluzone®) and CSL Biotherapies (Afluria®), produce the injectable trivalent inactivated vaccine (IIV). MedImmune (FluMist®) produces the live, attenuated influenza vaccine (LAIV4) intranasal. Novartis produces a cell-cultured trivalent vaccine (Flucelvax®) and a trivalent vaccine (Fluvirin®).

More information regarding this year's influenza vaccines and the presentations available can be found at <http://www.cdc.gov/flu/about/qa/vaccine-selection.htm>.

7) Which personnel are required to receive the influenza vaccine?

DoD policy requires annual influenza immunizations for all Active Duty, National Guard and Reserve personnel, designated civilians and healthcare personnel who provide direct patient care according to Service-specific guidelines.



8) Will my immunization be monitored by my Service?

Yes. All Services will monitor compliance using Service-specific immunization tracking systems (SAMS, MEDPROS, ASIMS, MRRS, and DEERS).

9) Who should receive the influenza vaccine and in what order if there is a shortage?

Should a vaccine shortage occur, vaccinate using existing priority tiers. Further directions will be provided by ASD(HA) and will be consistent with military needs and recommendations published in subsequent issues of the CDC's Morbidity and Mortality Weekly Report.

10) Is injectable vaccine reserved for any specific population?

Yes. The Services will reserve injectable vaccine for people in whom the intranasal vaccine is medically contraindicated or where the intranasal vaccine is unavailable due to logistical constraints.

11) Who can I contact if I have a problem after receiving my vaccine?

If you are having a medical emergency, call 911. Otherwise, contact your healthcare provider or the clinic at which you received your vaccination for appropriate follow-up. You may also contact the DoD Vaccine Clinical Call Center 24/7 at (866) 210-6469 or via email at <http://www.vhcinfo.org/contact.asp>. Any clinically significant medical event that occurs after vaccination should be submitted to the Vaccine Adverse Event Reporting System (VAERS) at <http://www.vaers.hhs.gov>.

The Disease General Information

1. What is seasonal influenza disease?

Influenza is a contagious respiratory illness caused by influenza types A or B viruses. Influenza viruses are easily spread by airborne respiratory droplets from person to person (often by sneezing or coughing). Symptoms of infection include fever, muscle aches, headache, malaise (a general feeling of sickness), nonproductive cough, sore throat, and runny nose. Most people who get the flu will have mild illness, will not need medical care or antiviral drugs, and will recover in less than two weeks. Some people, however, are more likely to get flu complications that result in being hospitalized and occasionally result in death. Pneumonia, bronchitis, sinus infections, and ear infections are examples of flu-



related complications. The flu also can make chronic health problems worse. For example, people with asthma may experience asthma attacks while they have the flu, and people with chronic congestive heart failure may have worsening of this condition triggered by the flu.

2) Who is at high risk for developing flu-related complications?

Children younger than 5 of age but especially children younger than 2, adult 65 years and older, pregnant women and individuals with various chronic medical conditions put them at greatest risk for hospitalization and possibly death related to infection. For a full list of high-risk conditions, visit http://www.cdc.gov/flu/about/disease/high_risk.htm.

3) How does influenza spread?

Influenza spreads from person to person through aerosolized respiratory droplets released when a person coughs, sneezes, or breathes on someone. People may also become infected with influenza by touching something contaminated with the virus and then touching their mouth, nose, or eyes.

4) How soon will I get sick after exposure to the influenza virus?

Most healthy adults may be able to infect others beginning a day before symptoms develop and up to 5 to 7 days after becoming sick. Children may pass the virus for longer than 7 days. Symptoms start 1 to 4 days after the virus enters the body. That means that you may be able to pass on the flu to someone else before you know you are sick, as well as while you are sick.

5) Will new strains of influenza virus circulate this season?

Influenza viruses are constantly changing, so it is not unusual for new strains to emerge at any time of the year. The 2013-2014 influenza trivalent vaccine strains are A/California/07/2009 (H1N1)-like, A/Victoria/361/2011 (H3N2)-like, and B/Massachusetts/2/2012-like antigens. The additional strain, B/Brisbane/60/2008-like antigen has been selected for those manufacturers licensed to distribute a quadrivalent influenza vaccine.

The Disease Prevention

1) Why do I need to be immunized against influenza every year?

Circulating wild influenza viruses change from year to year. Protection that develops after a person is infected or immunized against the circulating viruses

of one season does not provide adequate cross-protection when a new influenza strain develops. Immunity once vaccinated may wane after 6-8 months, thus requiring an annual vaccination for full protection.

2) What is the best way to protect myself and my family from getting influenza if we are not vaccinated?

Vaccination is your best protection against influenza infection. If you are unable to receive the vaccine, avoid close contact with people sick with the flu. Wash your hands often with soap and water or, if that is unavailable, use alcohol-based hand rub. To prevent the spread of germs, avoid touching your eyes, nose, or mouth and cover your mouth and nose with a tissue when coughing or sneezing.

3) When should I get vaccinated?

It is recommended that people get vaccinated against influenza as soon as vaccine becomes available in their community. Vaccinations should occur throughout the entire influenza season, which ends when product expires in early summer or supply is exhausted.

4) Where can I receive my vaccination?

The influenza vaccine can be received from many MTFs and clinics within DoD. To find a clinic near you, the MILVAX clinic finder can be found at <http://www.vaccines.mil/ClinicFinder>. Additionally, the TRICARE Management Activity issued a final rule authorizing TRICARE retail network pharmacies to administer seasonal influenza vaccine at no cost to eligible beneficiaries for the 2013-2014 influenza season. Soldiers who receive the influenza vaccination from non-military facilities must provide appropriate immunization data to their unit's Service-specific immunization tracking system point of contact no later than close of business the next duty day following vaccination, in order to properly document the annual requirement.

The Vaccines General Questions

1) How effective is influenza immunization in protecting me from illness caused by the different strains of influenza?

Vaccines are developed each year in an attempt to match the predicted virus strains. When they are well-matched, immunization of healthy adults is 70-90% effective in preventing influenza illness. When the circulating influenza strains are not well matched by the vaccine, effectiveness has been as low as 47-77%.



Vaccines may be somewhat less effective in elderly persons and very young children, but immunization can still help prevent serious complications from influenza illness.

2) What if I'm pregnant or breastfeeding? Can I still receive the seasonal influenza vaccine?

Yes. The ACIP, the American College of Obstetricians and Gynecologists, and the American Academy of Family Physicians have all recommended the routine vaccination of women who are pregnant, or who become pregnant during the influenza season. Pregnant women, as well as lactating/postpartum women and their newborn babies, are at high risk for influenza complications. Pregnant women may receive the inactivated injectable influenza vaccine during any point of gestation and postpartum, and breastfeeding women may receive the inactivated or live vaccine.

3) Are influenza vaccines harmful during my pregnancy?

Pregnant women are at high risk for influenza related complications and are a priority group for vaccination. The Food and Drug Administration (FDA) has classified inactivated vaccine as "Pregnancy Category B," indicating that animal reproduction studies have not demonstrated a fetal risk, but there are no controlled studies in pregnant women. The injectable influenza vaccine is recommended for immunization of pregnant women because the benefit of protection outweighs the potential risk of any adverse event. In a study of approximately 2,000 pregnant women who received inactivated influenza vaccine during pregnancy, no adverse effects were demonstrated in the fetus, infant or during early childhood. Ref: <http://www.cdc.gov/vaccines/pubs/preg-guide.htm>.

4) If a child is receiving an influenza vaccination for the first time, what is the appropriate administration schedule?

According to the ACIP and the American Academy of Pediatrics (AAP):

Children aged 6 months to 8 years who are receiving the influenza vaccine for the first time or whose previous vaccination status is unknown should receive two (2) doses of vaccine separated by at least four weeks.

Children aged 6 months through 8 years who have NOT received two (2) or more total doses of seasonal influenza vaccine since July 2010 should receive two (2) doses of vaccine separated by at least four weeks.

Children aged 6 months through 8 years who received two (2) or more total doses of seasonal influenza vaccine since July 2010 and all children 9 and older should receive one dose of seasonal influenza vaccine.

The pediatric administration algorithm can be found at

<http://www.cdc.gov/flu/professionals/vaccination/>

5) If a child 6 months to 8 years of age is receiving an influenza vaccination for the first time, must the same type of vaccine be administered for both doses?

No. The first and second doses can be from different manufacturers or formulas. IIV can be used when vaccinating children aged 6 months to 8 years, and LAIV4 (FluMist®) can be used for children aged 2 years and older, who have not been previously vaccinated.

6) How are injectable and intranasal influenza vaccines shipped and stored?

All injectable and intranasal vaccines are shipped and should be stored at 2 to 8 degrees Celsius (36 to 46 degrees Fahrenheit). When the vaccine arrives at your facility, it must immediately be placed in a refrigerator. In addition, protect Afluria® from light until use. Do not use vaccines past the expiration date printed on the vaccine vial or syringe. Once the Afluria® multi-dose vial has been punctured, the vaccine must be used within 28 days. Fluzone® multi-dose vials may be used after puncture until the expiration date on the vial. Any prefilled syringes, sprayers or single-dose vials must be discarded if the tip cap is removed, a needle is placed on the syringe or the cap of the vial has been removed.

7) If I need to place a tuberculin skin test (TST), should I be concerned about administering the influenza vaccine at the same time?

Yes. The live vaccine (FluMist®) may suppress a positive response to a tuberculin skin test (TST or PPD) in a person who is infected with tuberculosis (TB), resulting in a false negative. If a person needs TB skin testing and LAIV, you can correctly administer both in one of three ways:

- Give the TST (PPD) and the vaccine simultaneously.
- Give the TST (PPD) first and when the person returns to have the skin test results interpreted, administer the live vaccine.
- Give the live vaccine and then delay administration of the TST (PPD) for 28 days.

Injectable influenza vaccines and tuberculin skin test can be administered concurrently or at any interval.

8) Can live vaccines and the influenza vaccine be administered on the same day?

The inactivated injectable influenza vaccine may be administered on the same day as live vaccines or at any interval, but the live intranasal influenza vaccine must be administered on the same day as the other live vaccines or separated by 28 days.

The Vaccines

Trivalent Inactivated Vaccine (TIV), Injectable Fluzone® and Afluria®

1) What is Fluzone®?

Fluzone® and Fluzone Pediatric® are inactivated injectable influenza virus vaccines manufactured by Sanofi-Pasteur. Presentations include a multi-dose vial, a thimerosal-free single-dose syringe and single-dose vial. Fluzone® and Fluzone Pediatric® are licensed for persons aged 6 months and older, Fluzone HD® is licensed for persons aged 65 years and older and Fluzone Intradermal® is licensed for persons aged 18 through 64 years. DoD only contracted for Fluzone® and Fluzone Pediatric® this season.

2) What is Afluria®?

Afluria® is an inactivated injectable influenza vaccine manufactured by CSL Biotherapies. Presentations include a multi-dose vial and a thimerosal-free single-dose syringe. Afluria is licensed for persons aged 5 years and older; however, ACIP recommends Afluria be administered to children aged 9 years and older due to increased reports of febrile reactions in children younger than 9. Other age-appropriate, licensed seasonal influenza vaccine formulations can be used. If no other age-appropriate, licensed seasonal influenza vaccine is available for children aged 5 years through 8 years who are at high risk for influenza complications, Afluria® may be given. Healthcare providers should discuss the benefits and risks of influenza vaccination with the parents or caregivers prior to administering Afluria®.

3) Why does ACIP guidance state that Afluria® should not be given to children 8 years of age or younger, except in special circumstances, even though it is FDA approved for ages 5 years and above?

During the 2010 flu season in Australia, this influenza vaccine was associated with an increased frequency of fever and febrile seizures in children aged 6 months through 4 years. In Australia, fever in children aged 5 through 8 years was also reported following vaccination. In several studies conducted prior to the 2010-11 flu season in the United States, no association between flu vaccine

administration and febrile seizures has been detected. However, ACIP changed the recommended age from 5 years and above to 9 years and above.

4) Who should receive the injectable vaccines?

ACIP recommends the use of injectable vaccines for immunization of persons described as eligible in manufacturer package inserts and for whom the live virus vaccine (FluMist®) is contraindicated.

- All children aged 6 months through 4 years (59 months).
- All persons ≥ 50 years.
- Women who are or will become pregnant during influenza season.
- Anyone with long-term health problems.
- Anyone with a weakened immune system.
- Anyone 6 months through 18 years of age on long-term aspirin treatment.
- Residents of nursing homes and other chronic-care facilities.
- Anyone who lives with or cares for people at high risk for influenza-related complications.
- Household contacts and caregivers of children from birth up to 5 years of age and people 50 years and older.

5) Who should not receive the injectable influenza vaccines?

- People who have a severe allergy to chicken proteins, eggs, egg products, or any components of the influenza vaccine.
- People who have had a severe reaction to an influenza vaccination in the past.
- People who have a history of Guillain-Barré Syndrome.
- People who are sick with a fever. These individuals may be immunized once their symptoms resolve.
- Children younger than 6 months of age.

6) What side effects can I expect when I receive the injectable influenza vaccine?

The viruses in inactivated influenza vaccine have been killed so you cannot become infected with influenza. Side effects which may occur are soreness, redness, or swelling where the vaccination was administered, fever, weakness, headache, and muscle aches. If these problems occur, they usually begin soon after immunization and typically last for one to two days. Most people who

receive influenza vaccine experience no serious problems. In rare instances, serious problems such as a severe allergic reaction can occur.

The Vaccines

Quadrivalent Live Attenuated Intranasal Vaccine (LAIV4), Intranasal FluMist®

1) What is FluMist® Quadrivalent?

FluMist® is a live, attenuated (weakened) influenza virus vaccine manufactured by MedImmune. The presentation is a quadrivalent vaccine that contains the four influenza strains (two influenza A and two influenza B) recommended by the WHO. The vaccine is latex- and thimerosal-free and administered via a single-dose sprayer.

2) Who should receive intranasal vaccine?

FluMist® is approved for all healthy people aged 2-49 years who are not pregnant. For more information, see <http://www.vaccines.mil/flu>.

3) Who should not receive FluMist® (LAIV4)?

The following populations should not be immunized with the Live Attenuated Intranasal Vaccine:

- People younger than 2 years or those 50 years old or older.
- People with asthma, reactive airways disease, or other chronic disorders of the pulmonary or cardiovascular systems.
- People with other underlying medical conditions, including such metabolic diseases as diabetes, cardiac/kidney/liver diseases, and blood disorders.
- People with known or suspected immunodeficiency diseases or who are receiving immunosuppressive therapies.
- Children or adolescents receiving aspirin therapy or other medicines containing aspirin.
- People with a history of Guillain-Barré Syndrome.
- Pregnant women.
- People with a history of hypersensitivity, including anaphylaxis, to any of the components of LAIV or to eggs.

4) What side effects can I expect when I receive the vaccine?

The viruses in the intranasal vaccine are weakened and do not cause severe symptoms associated with influenza. Common side effects may include runny

nose, headache, fever, cough, and sore throat. Other possible side effects are chills, decreased activity, decreased appetite, irritability, muscle aches, and tiredness/weakness. For more information, see <http://www.flumist.com>.

Myths and Facts

1) Myth #1: Having influenza is similar to getting a cold; therefore, an immunization is not really necessary.

Fact: On average, more than 226,000 people are hospitalized from flu complications, including 20,000 children; about 30,000 people die from influenza each year. Vaccination provides the best protection available from the influenza virus even when the vaccine does not closely match the circulating flu strains. A vaccination may lessen the severity of influenza illness and is important for persons at high risk for serious flu-related complications and for close contacts of high-risk individuals. More information can be found at <http://www.cdc.gov/flu/about/qa/flushot.htm> and <http://www.cdc.gov/flu/about/qa/disease.htm>.

2) Myth #2: Side effects from the influenza vaccine are worse than influenza itself.

Fact: The most common side effect you are likely to experience with the injectable influenza vaccine is a sore arm at the site of injection. The risk of a rare allergic reaction is far less than the risk of severe complications from influenza. Live attenuated intranasal influenza vaccine can cause mild symptoms in the recipient. Common side effects can include runny nose, headache, fever, cough, and sore throat. More information can be found at <http://www.cdc.gov/flu/about/qa/flushot.htm>.

3) Myth #3: Only elderly people really need the influenza vaccine.

Fact: Children younger than 6 months of age are at the most risk for having complications from influenza. However, they are too young to get the influenza vaccination. To protect these infants, it is very important that their household members and out-of-home caregivers be vaccinated against influenza. Influenza vaccine can prevent 66% or more influenza infections in young children, with even higher estimates for older children, when the vaccine strains are well matched to the flu viruses causing illness. Vaccinating close contacts of children can also help decrease children's risk of getting influenza. Among elderly persons not living in chronic-care facilities (such as nursing homes) and those persons with long-term (chronic) medical conditions (such as asthma, diabetes, or heart disease), influenza vaccinations are 30-70% effective in preventing



hospitalization for pneumonia and influenza. Among elderly nursing home residents, influenza vaccinations are the most effective in preventing severe illness, complications that may follow influenza (like pneumonia), and deaths related to influenza. Because persons aged 65 years and older are at highest risk for serious complications from influenza, it is also important that people who live with or care for those at high risk for serious complications get an influenza vaccination. Everyone who is healthy and eligible to receive the vaccine should take advantage of the opportunity to boost their immunity to seasonal influenza. More information can be found at <http://www.cdc.gov/flu/about/qa/vaccineeffect.htm>.

4) Myth #4: You must get the influenza vaccine before the influenza season, or it is not worth getting.

Fact: Influenza vaccine can be given before or during the influenza season. Influenza vaccinations provide protection against the influenza strains contained in the vaccine through one influenza season. Vaccinations should begin as soon as vaccine is available and continue throughout the influenza season. More information can be found at <http://www.cdc.gov/flu/about/qa/misconceptions.htm>.

5) Myth #5: I can take medications prescribed by my doctor instead of getting the influenza vaccine.

Fact: Antiviral medications given within the first few days of symptom onset can reduce the duration and severity of the disease, but cannot cure it. These drugs are not a substitute for the influenza vaccine. Remember, influenza vaccine is the best defense against seasonal influenza, but antiviral drugs can be an important second line of defense to treat influenza or prevent influenza infection. More information can be found at <http://www.cdc.gov/flu/protect/antiviral/keyfacts.htm>.

